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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PALENIK, JEFFREY T

ART UNIT

PAPER NUMBER

1615

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DELIVERY MODE

08/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/508,407

Applicant(s)

GAYTAN, JESSE

Examiner

Jeffrey T. Palenik

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 1-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

STATUS OF THE APPLICATION

Receipt is acknowledged of Applicants' Amendments and Remarks, filed 12 May 2009 regarding Application N° 10/508,407. Said filings are entered on the record. The Examiner further acknowledges the following:

Claims 1-34 are pending, wherein claims 1-18 stand withdrawn.

Claims 19-30 have been amended. Of particular note, claim 19 has been amended such that the length and width dimensions are now required in the limitations of the invention. Claims 20-22 have been amended to clarify that the size range is directed to the size of the solid particle. Claims 23-25 have been clarified to recite that the particles have a "particle size distribution". Claims 26-30 have been amended to clarify the particle size dimension as being directed to its "width". Claims 27-30 amend the phosphoroamido(di)thioate solids as being "milled". Sufficient support has been provided within Applicants' disclosure.

No claims have been added or cancelled.

Thus, claims 19-34 continue to represent all claims currently under consideration.

INFORMATION DISCLOSURE STATEMENT

No new Information Disclosure Statement (IDS) have been filed for review.

WITHDRAWN REJECTIONS

Rejection under 35 USC 112

Applicants' amendment to claims 19, as discussed above, are sufficient to render moot the indefiniteness rejection, under 35 USC 112, second paragraph. Thus, said rejection has been **withdrawn**.

Applicants' amendments to claims 20-30, as discussed above, have been fully considered and are persuasive, thereby rendering moot the lack of antecedent basis rejection, under 35 USC 112, second paragraph. Thus, said rejection has been **withdrawn**.

MAINTAINED REJECTIONS

The following rejections are maintained from the previous Office Correspondence dated 12 November 2008 since the art which was previously cited continues to read on the claims as presently amended.

CLAIM REJECTIONS - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19 and 24-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Chiba et al. (USPN 5,190,764).

The instant claims are directed to a compacted granular composition of milled phosphoroamidodithioate solids wherein said solids have been milled to have a particle size distribution wherein at least 67% of the solids have a size between 4.6-88 microns (claims 19 and 24-32). This limitation is interpreted broadly and reasonably by the Examiner as the granular composition being composed of at least 67% phosphoroamidodithioate solids (i.e. at least 67 pure phosphoroamidodithioate solids) and as having an average particle diameter between 4.6-88 microns. With regard to the limitations recited in claims 24 and 25, which state that the “solids have a particle size having a standard deviation of less than 35 μm ” or “...less than 30 μm ”, respectively; until some material differences in the properties of the composition are demonstrated, said limitations are considered by the Examiner to be directed toward the instant granular composition of claim 19. The limitations wherein the granules have been produced either by milling or jet-milling as recited in claims 19 and 26-30, are deemed by the Examiner as product-by-process limitations, which per MPEP §2113, are considered as holding no patentable weight. Regarding the limitations recited in claims 28-30 wherein the compacted granules have (e.g. comprise) “less than 14 wt%”, “less than 13 wt%” or “less than 11 wt% of said [granular solids] have a size within the range of 44-88 μm ”, the Examiner broadly and reasonably interprets each of these limitations as reading on the granules comprising 0 wt% of particles within the range of 44-88 μm . Regarding the limitations recited in claims 31 and 32, which state that the “said granules have a bulk density of at least 450 g/L” or “...about 450 g/L to about 650 g/L”, respectively; until some material differences in the properties of the composition are demonstrated, said limitations are considered by the Examiner to be directed toward the instant granular composition of claim 19.

Example 6 of Chiba et al. specifically teaches the instantly claimed phosphoroamidodithioate solid acephate (e.g. ORTHENE[®]) as having been prepared via milling, as having a purity of 98.5% and a mean particle diameter of 30 microns. The Example is also silent to any weight percentages of milled solid particles produced, which range in size from 44-88 microns. Thus the Examiner interprets this silence as an express teaching of less than the instantly claimed 11%, 13%, and/or 14% by weight of milled phosphoroamidodithioate solid particles which range in size from 44-88 microns. The milled acephate having a purity of 98.5% is interpreted as the milled product comprising 98.5 wt% of acephate. Claim 2 teaches a sustained release pesticide comprising solid pesticidal particles wherein each of said particles comprises a core of a solid pesticidal active ingredient, and a coating comprising a layer of fine hydrophobic particles. Chiba further expressly teaches compressing the hydrophobic substance and the fine pesticide particles into tablet form as the best mode for working the sustained release pesticide (col. 5, lines 32-36).

CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 19-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Chiba et al. (USPN 5,190,764).

The instant claims are directed to a compacted granular composition comprising phosphoroamidodithioate solids of a particular size distribution, as discussed above. Claims 19-22 further limit the average size range of the milled solids recited in claim 19. Claim 33 recites that the compacted phosphoroamidodithioate granules comprise a binder, a particulate flow aid (i.e. a lubricant) and the phosphoroamidodithioate species acephate. Claim 34 further limits the binder of claim 33 to a polyethylene oxide polymer.

The teachings to Chiba are discussed above. Chiba further teaches that the compositions taught in claim 2 and Examples 6 and 7, may further comprise auxiliary additives. Such additives include lubricants such as metal salts of stearates (e.g. magnesium stearate) (col. 5, lines 50-60) as well as polyethylene oxide polymers (e.g. anionic surfactants) such as polyethylene glycol ethers and esters (col. 10, lines 1-12). Claims 12, 18 and 19 also teach various size range limitations for the pesticide particles of the composition, the broadest of which ranges from 0.01-100 microns.

Chiba does not expressly teach particles formed within the more narrowly recited size ranges.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to obtain granules of a phosphoroamidodithioate solid such as acephate which have a

particular milled size distribution, combine said particles with a lubricant and a polyethylene oxide polymer, as taught and suggested by Chiba, and produce the instantly claimed invention.

One of ordinary skill in the art would have been highly motivated to do this because Chiba expressly teaches forming granules using a pesticide active ingredient such as acephate (Examples 6 and 7) and further teaches in claims 2 and 8, a particulate composition comprised of said active and auxiliary lubricants such as metal salt stearates. Other auxiliary binder additives such as polyethylene glycol polymers are taught as being used to help create the end product, which is preferably taught as a compression-formed tablet (col. 5, lines 32-36).

As mentioned above, the reference does not expressly teach the narrow ranges of milled particles sizes, as claimed by Applicant. Since the values of each parameter with respect to the claimed composition are adjustable, it follows that each is a result-effective parameter that a person having ordinary skill in the art would routinely optimize. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ. As evidenced by claims 12, 18 and 19 of Chiba, the size of the pesticide particles produced may range as broadly as 0.01-100 microns. Thus, it would have been customary for an artisan of ordinary skill, to adjust the size of the milled phosphoroamidodithioate solids of the compacted granules to reflect narrower ranges such as 15-23 microns, in order to achieve the desired granule formulation. Thus, absent some demonstration of unexpected results from the claimed parameters, optimization of any of these parameters would have been obvious at the time of Applicants' invention.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention.

Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the reference, especially in the absence of evidence to the contrary.

RESPONSE TO ARGUMENTS

Applicants' amendments and remarks regarding the rejection of claims 19 and 24-32 under 35 USC 102(b) as being anticipated by Chiba et al., and with regard to the rejection of claims 19-34 under 35 USC 103(a) as being unpatentable over Chiba et al., have both been fully considered, but neither are persuasive.

Applicants argue that the teachings of Chiba do not describe the Orthene® (e.g. phosphoroamido(di)thioate solid) as having an average length of less than 150 microns and as having an average width of less than 40 microns. Applicants' further argue that Chiba does not teach the solid as being jet-milled.

In response, the Examiner respectfully submits that the phosphoroamido(di)thioate acephate solid particles used in Example 6 of Chiba are taught as having an average diameter of 30 microns. The teaching of particles having a diameter is broadly and reasonably interpreted by the Examiner as a teaching that the particles closely resemble a sphere in shape. As such the "average diameter" dimension, which is used to teach the size is similarly interpreted by the Examiner as a teaching of not only the length, but the width as well. Since the average diameter of the particles is 30 microns, it is thus concluded by the Examiner that both the length and width of the particles meets the instantly amended limitations.

Regarding the argument that Chiba does not teach the solid particles as being prepared via jet-milling, the Examiner respectfully maintains that Applicants are arguing a limitation which is presently considered to be a product-by-process limitation. Per MPEP §2113, “even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself”. Furthermore, “if the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process”. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Thus, for these reasons, Applicants’ arguments are found unpersuasive. The above rejection is hereby **maintained**.

All claims under consideration remain rejected; no claims are allowed.

CONCLUSION

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

CORRESPONDENCE

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey T. Palenik whose telephone number is (571) 270-1966. The examiner can normally be reached on 7:30 am - 5:00 pm; M-F (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey T. Palenik/
Examiner, Art Unit 1615

/MP WOODWARD/
Supervisory Patent Examiner, Art Unit 1615